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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/943,964	08/31/2001	Shawn S. Cornelius	10022/55	1551
28164	7590	11/22/2004	EXAMINER	
ACCENTURE CHICAGO 28164 BRINKS HOFER GILSON & LIONE P O BOX 10395 CHICAGO, IL 60610			DIVECHA, KAMAL B	
			ART UNIT	PAPER NUMBER
			2151	

DATE MAILED: 11/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/943,964

Applicant(s)

CORNELIUS ET AL.

Examiner

KAMAL B. DIVECHA

Art Unit

2151

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE THREE MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 31 August 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 8/31/2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) 0.                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>09092004</u> .  | 6) <input type="checkbox"/> Other: _____                                    |

**DETAILED ACTION**

**Drawings**

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: the reference numeral 10 on page 5 line 4 is not shown in figure 10.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

**Specification**

1. The disclosure is objected to because of the following informalities: the said interpreter 30 on page 11 line 10 was intended to be interpreter 38 and the said management system 145 on page 15 line 12 was intended to be management system 14.

Appropriate correction is required.

**Claim Rejections - 35 USC § 112**

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 9, 10, 11, 12, 14 and 17 are rejected under 35 U.S.C. 112, second paragraph, as there is insufficient antecedent basis for the limitations set forth below in the claims.

- Claims 9 and 11 recites the limitation “the first stage” in line 10 and 16 respectively.
- Claims 10 and 12 recites the limitation “the second stage” in line 13 and 19 respectively.
- Claim 14 recites the limitation “the status message” in line 13.
- Claim 17 recites the limitation “the stages” in line 2.

**Claim Rejections - 35 USC § 102**

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 22 and 23 are rejected under 35 U.S.C. 102(b) based upon the invention anticipated by Hirosawa et al (U.S. Patent No. 5,237,677).

Hirosawa et al discloses A method of monitoring a business-to-business system, the method comprising (figure 1 element #200, 200a and 200b, see abstract); transmitting a status code from a base data processing system to a remote data processing system via a communications network (column 4 lines 14-16 and figure 1 link #L4); receiving the status code at a data receiver in the remote data processing system (column 4 lines 18-21 and figure 1 item

Art Unit: 2151

#23 through item #21); inputting the status code into a remote software module of the remote data processing system (item #25 and the direct link between item #23 and 25 and the remote system 250); outputting the status code from an output of the remote software module if the remote software module provides a logical data path of continuity to the status code (figure 1 item #22 connected to item #21); and transmitting the outputted status code back to the base data processing system via the communications network (figure 1 item #21 and link #L4) as feedback indicative of the proper end-to-end continuity of communications in a business-to-business environment.

With respect to claim 23, Hirosewa further discloses the method as in claim 22, the method further comprising: storing the status code from an output of the remote software module as a dummy transaction in the database (column 9 lines 52-56 and figure 1 item #256); and retrieving the status code as the dummy transaction in the database and feeding the retrieved status code for transmission to the base data processing system if the database provides a logical data path of continuity for the status code (column 9 lines 57-60).

### **Claim Rejections - 35 USC § 103**

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-5 and 8-21 are rejected under 35 U.S.C. 103(a) as obvious over Hirosewa et al. (U.S. Patent No. 5,237,677).

Hirosawa et al discloses a remote data processing system comprising: a data receiver for receiving a data message (figure 1 item # 3); a remote software module arranged to receive the data message from the data receiver (figure 1 and software running in the system 100), the remote software module including at least a first stage software component cascaded with a second stage software component (figure 1 software module #8 cascaded with software module 12); and a fault detector associated with the first software stage component and the second software stage component to detect whether the data message or a derivative thereof flows through at least one of the first stage software component and the second stage software component (figure 1 element #10).

With respect to claim 2, Hirosawa et al further discloses the system as in claim 1 above further comprising a remote status reporter for reporting a status message on at least one of the remote software module and hardware of the remote data processing system (column 8 lines 36-41).

With respect to claim 3, Hirosawa et al further discloses the system as in claim 1 further comprising a database for storing detected faults, stage identifiers, and fault descriptions outputted by the fault detector (figure 1 item #256 and figure 2).

With respect to claim 4, Hirosawa et al further discloses the system as in claim 1 further comprising a database for storing status data on corresponding components of a remote data processing system (column 8 lines 50-52).

With respect to claim 5, Hirosawa et al further discloses the system as in claim 1 further comprising a database, the fault detector logging one or more error messages into the database (figure 1 item #256 and column 4 lines 9-17).

With respect to claim 13, Hirose et al discloses a method for monitoring a remote data processing system (see abstract), the method comprising: receiving a data message via a communications network (figure 15A step #35d); cascading at least a first stage software component and a second stage software component to form an installed remote software module for accepting the received data message (column 6 lines 46-49; figure 1 item #3, item #8 and item #10; column 9 lines 38-40); detecting the data message or a derivative at a group of logical nodes within the installed remote software module to determine flow of the data message, or a derivative thereof, between the logical nodes and, hence, flow through at least one of the first stage software component and the second stage software component (column 4 lines 43-47); and identifying a deficient software component of the installed remote software module as any of said software stage components that blocks or disrupts the flow of the data message between two adjacent logical nodes (figure 12 block #8 diagnosis the faulty software).

With respect to claim 16, Hirose et al further discloses the method as in claim 13 above further comprising: routing the status code from the base data processing system via the communications network to a remote data processing system associated with the installed remote software module (column 4 lines 14-16; column 7 lines 50-53); and routing the status code from the remote data processing system to the base data processing system via the communications network to indicate that the continuity of at least one logic data path traversed by the status code (column 9 lines 20-23; column 10 lines 58-60).

With respect to claim 18, Hirose et al further discloses the method as in claim 13 further comprising: determining that a stage immediately following the last detected data message is at fault (figure 11 step #31i following step #31k to figure 14A step #34c-34d).

With respect to claim 19, Hirosawa further discloses the method as in claim 13 further comprising: assigning stage identifiers to distinguish one stage from another and to identify a faulty stage (figure 2 item #6d and the row 1, 2...n).

With respect to claim 20, Hirosawa further discloses the method as in claim 13 further comprising: associating a fault description with the stage identifier for transmission to a management system via a communications network (figure 2 item #6d and item #6g).

With respect to claim 21, Hirosawa further discloses the method as in claim 13 further comprising: archiving a fault analysis report in a database associated with the remote processing system (column 4 lines 31-36).

Hirosawa et al does not explicitly disclose the monitoring and controlling data processing system as a remote data processing system however Hirosawa et al does teach and disclose the monitoring system located at a remote site (column 7 lines 33-40). This implies that the concept of doing something "remotely" was known fourteen years ago and is a well-known art today also. Therefore it would have been obvious to one of ordinary skill in the art to incorporate the teaching of Hirosawa et al as stated above and implementing it as a remote system because it would have troubleshoot software and hardware faults or errors efficiently and improved the efficiency of the overall system.

8. As per claims 8-12, Hirosawa et al does not explicitly disclose the logical implementations of the connections and identifying the software stages as a faulty software, but it would have been obvious to one of ordinary skill in the art to implement the limitations set forth in claims 8-12 in a desire shape and forms by using logical operators, functions and subroutines in order to obtain a desire output.



9. With respect to claim 14 and 15, Hirose et al does not explicitly teach passing a status code from an input of a module to an output of a module to determine the operational status of the module but Hirose et al does show the input and output from a software module (figure 1 item #10 and the links) and a communication link (figure 1 link L4) where status codes and other data information would have been passed for other purposes.

10. The limitation set forth in claim 17 is well known, expected and obvious to the one skill in the art. Tapping is one of the many support functions used in testing the operation of logic of a logical design.

11. Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being obvious over Hirose et al. (U.S. Patent No. 5,237,677) in view of Gephardt (U.S. Patent No. 5,175,820).

Hirose et al discloses the limitations of claim 1 as set forth above.

However, Hirose et al does not explicitly disclose the system as in claim 1 further comprising a feedback generator associated with the remote software module, the feedback generator receiving a status code outputted from the remote software module and forwarding the status code to a transmitter for transmission via a communications network.

Gephardt explicitly discloses an apparatus for use with a computing device for controlling communications with a plurality of peripheral devices including a feedback generator to indicate operational modes (column 5 lines 44-48; figure 3). The responding peripheral (read as feedback generator) receives a status code from software and forwards the status code to a transmitter (see abstract) and it also generates the status codes for a transmitter (figure 3 and column 5 lines 60-66).

At the time of the invention it would have been obvious to a person of ordinary skill in the art to modify the system of Hirose et al as stated above with the feedback generator of Gephardt because it would have detected, coded and forwarded the status code format to a transmitter for transmission and would have improved the transmission efficiency.

**Additional References**

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. Perholtz et al U.S. Patent No. 5,732,212
- b. Berstis U.S. Patent No. 6,137,805
- c. Hyatt U.S. Patent No. 4,531,182

**Conclusion**

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to KAMAL B. DIVECHA whose telephone number is 571-272-5863. The examiner can normally be reached on 8.30am-5.00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Maung Zarni can be reached on 571-272-3939. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2151

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**ZARNI MAUNG**  
PRIMARY EXAMINER